

Northern and Western Missouri Germplasm

Rough Gayfeather or Rough Blazing Star (*Liatris aspera* Michaux) Zones 1 and 2 were released in year 2001.

Cooperating agencies in these releases were Natural Resources Conservation Service (NRCS), Missouri Department of Conservation (MDC), and Missouri Audubon Society.

Northern and Western Missouri Germplasm Rough Gayfeather is recommended for use in prairie restoration, Conservation Reserve Program (CRP) diversity, wildlife food and habitat, roadside revegetation, parks and gardens. These releases are recommended for planting within its zones of origin. Northern Missouri Germplasm Zone 1 was collected from glaciated plains (all counties within the political boundaries of Missouri north of the Missouri River). Western Missouri Germplasm, Zone 2 was collected from the Missouri Osage Plains (all counties within the political boundaries of Missouri, south of the Missouri River and west of the line formed by the eastern boundaries of Saline and Green counties).

Liatris aspera is a desirable component in warm season grass mixtures. It is an excellent food source for a wide variety of wildlife species. The striking flowers of this species make it highly desirable for beautification of any landscape venue.

Description

Rough gayfeather is a moderately long-lived perennial that grows 0.1 to 1 meter tall. Each plant carries one to few unbranched stalks. Lower leaves are narrowly linear up to 38cm with a petiole; upper leaves are sessile and graduate to much shorter lengths. Twenty to 40 small tubular rose-purple flowers are packed tightly in a head surrounded by a 2cm sessile cup of rounded bracts. There could be a few to 150 or these heads on a stalk. The flower heads are widely spaced on the stalk. They bloom in order from top downward from August to

October. Fruits are kernels 1-2mm wide by 4-6mm long crowned by a 7-8mm gray-pink pappus tightly packed in each head.



***Liatris aspera* Michaux**

Line drawings provided by "An Illustrated Guide to Iowa Prairie Plants" by Paul Christiansen and Mark Muller and the University of Iowa Press.

Adaptation

Rough gayfeather is native to the prairies and glades from Ohio and North Dakota south to Louisiana and eastern Texas. It prefers well drained upland, often sandy sites, disturbed, gravelly and this soils, but will tolerate all but saturated soils.

Northern and Western Missouri Germplasm Rough Gayfeather originated from counties located within their corresponding zone. These zones serve both the geographic area represented by the genetic material of the parent seed and the potential market of the end product, which is commercially available Missouri Ecotype Seed.

Recommended Area of Use of Missouri Germplasm Rough Gayfeather



Establishment for Commercial Production

This species germinates well if seed is planted in the field in the fall (November-December). Planting at a rate of 40 seeds per row foot at a depth of 3mm is advised. For seed production a plot is planted in the spring or is to be started from seedling plants. Seed needs stratification for eight weeks.

Place seeds on a wet cloth and fold to fit a labeled zip lock bag. Refrigerate (35° to 40° F) for about eight weeks. Spread seed to dry and row-plant immediately. March to early April is a good time. For seedling plugs, place 1-3 seeds in each seedling cell, cover with a thin layer of growing medium and place in a sunny location where the soil temperature will rise to 77° F. Check seedling soil for root filling after about six weeks in the greenhouse. Plant the potted seedlings in the ground about 15cm apart from last frost date to early June. Water seedlings in.

Management

In seed production plots, weed control can be accomplished by mulching and with grass herbicides. If this species is planted in well-drained soil, the plot could need some irrigation the first year, especially at the time the plants are in mid-flower and when they are setting seed. Remove dead plant material before new growth emerges in subsequent years. Do not till during blooming and seed set periods.

Rough gayfeather can be included in CRP and prairie planting mixtures at <1% or 1 seed 2/ sq.ft. Number of seed per gram averages 480, which extrapolates to 217,920 per pound. Some seed will germinate the first season and some the second. When included in a short or tall grass planting, burning during the dormant season is the only maintenance necessary. Mowing after maturity will scatter the seed.

Availability

Released G0 and G1 seed of Missouri Germplasm Rough Gayfeather has been allocated to Missouri seed growers by the USDA-NRCS.

For More Information

Visit our Plant Materials Internet site at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

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